QUEBEC, MONTMORENCY & CHARLEVOIX

RAILWAY

A SKETCH OF THE SCHEME

AND

APPENDICES CONTAINING VARIOUS STATISTICAL

AND

OTHER INFORMATION

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THREE RIVERS
"LA CONCORDE" PRINT
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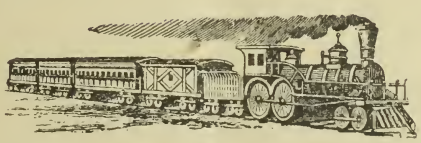

THREE RIVERS
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QUEBEC, MONTMORENCY & CHARLEVOIX RAILWAY

A SKETCH OF THE SCHEME

ORGANIZATION OF THE COMPANY

The Quebec, Montmorency and Charlevoix Railway Company was incorporated by a special act of the Legislature of Quebec, passed during the session of 1881. According to the provisions of this act, the Board of Directors of the Company is composed of seven directors elected each year. The minimum share-capital of the company is fixed at $500,000, with power to increase it, if necessary, and authority to issue bonds to the amount of $1,000,000. The works authorised must be commenced in 1883 and completed in 1893.

OBJECT OF THE COMPANY

The object of the company is to establish a permanent sea-port at Saint-Catherine's Bay, opposite Tadousac, and connect that port with the cities of the West, through the railway they intend to build and which will form the natural extension of the Quebec, Montreal, Ottawa and Occidental Railway. This new port will be the only one, in all the province of Quebec, open to navigation during winter and in direct connection with all the railways of the north shore of the Saint-Lawrence, bringing the products of the west to the canadian sea-board.

The company also intend to build a loop-line of some fifty or sixty miles in length to connect the town of Chicoutimi, the center of the richest portion of the Lake Saint-John region, with the City of Quebec.

THE COUNTRY THROUGH WHICH THE LINE WILL RUN

The line will start from the city of Quebec, which is the actual terminus of the Quebec, Montreal, Ottawa and Occidental railway, on the north shore of the Saint - Lawrence, and of the Grand Trunk and Intercolonial railways, on the south shore. In 1871, according to the census taken in that year, the population of the city and suburban municipalities was 59,699 inhabitants. After leaving Quebec and crossing Saint-Charles river, the line will run through the wealthy parish of Beauport, inhabited by a population of over 5000 souls. Along the line are several manufacturing establishments, amongst which may be mentioned Renaud's grist-mill, where over two hundred thousand bushels of wheat imported from the West are annually turned into flour ; Chinic and Beaudet's nail-factory, Fairbank's oil-mills, Richardson's tannery and the Montmorency saw-mills, the largest establishment of the kind in the province, and which every year turn out millions and millions feet of lumber, sent to Quebec to be loaded on board of ships for exportation. Near the saw-mills, the line will cross the river, just below the famous *Montmorency Falls*, which are visited every year by thousands of tourists.

Then comes the parish of l'Ange-Gardien, inhabited by rich farmers who daily bring large quantities of vegetables and dairy produce to the markets of Quebec in summer, and make for the same markets several thousands cords of fire-wood in winter.

Château-Richer is the next parish traversed by the line. It is the *chef-lieu* of the county of Montmorency. The farmers are rich and large contributors to the markets of Quebec. They also send every year to the city from six to ten thousands cords of fire-wood, besides large quantities of first class building stone. In the year 1871, according to the census, over 100,000 cubic feet of cut stone were taken out from the quarries of that locality and brought up to Quebec. Since several years, there are two stage lines running between Château-Richer and Quebec, and both these lines make money. About a mile from the village, the line crosses river Saut-à-la-Puce, about half a mile below a fall forming a splendid water-power which actually is only used for a grist-mill. Saut-à-la-Puce is a favorite summer resort for numbers of Quebec people who frequent Lefrançois Temperance Hotel.

After Château-Richer comes the parish of Saint-Anne, celebrated for the shrine and church dedicated to this Saint, and visited every summer by over fifty thousands pilgrims, coming from all parts of the province, and even from the United States. Two or three large steamboats make the voyage from Quebec to Saint-Anne every sunday,

besides the regular daily line and the excursions on week days, and they are always crowded, although pilgrims and sick persons have to walk nearly half a mile over the wharf to reach the church. There are about ten hotels in the village and all do well. This parish is also rich in farm, dairy and garden produce, which have to find their way to the markets of Quebec.

Some three miles further than the village, the line will cross river Sainte-Anne, which drains a large and fertile valley, covered by fine forests of spruce, tamarac, birch, maple, ash and elm. There is a comparatively large business carried on at this place. Thousands cords of fire-wood are yearly brought down here by the inhabitants of Saint-Féréol and thence shipped by *bateaux* to Quebec. Once the railway built, it is safe to assume that at least ten thousand cords of soft and hard wood will be carried every year from river Saint-Anne to Quebec. Near by is also a brick-kiln which might become an important contributor to the traffic of the line. River Saint-Anne, or *Grand River*, as the place is commonly called, would become a favorite summer resort as soon as the railway would be open thither. This locality is unsurpassed for picturesque and fine scenery. American artists are seen there each summer copying from nature the splendid panoramas offering to view in all directions. And although there is no regular or comfortable communication between that place and Quebec, a distance of about twenty-five miles, several families from the city spend the summer there. The building of the railway will of necessity determine the opening of a good hotel which will undoubtedly attract crowds of visitors to this locality.

The next parish is Saint-Joachim, where the priests of the Seminary have their celebrated summer residence of the *Petit-Cap*. This parish is very rich in farm produce and would give a good local traffic. It is also the terminus of the road which constitutes during winter the only outlet by which the populations of the counties of Charlevoix and Saguenay, and the greatest part of the county of Chicoutimi, can reach Quebec.

Saint-Joachim will be the last station on the first section of the road, which will have a lenght of about twenty-seven miles. The following fact may give a fair idea of the traffic that may be expected on this section. The receipts collected by the Turnpike-Trust on vehicles of all kinds at the toll-gates of Montmorency and Dorchester bridges average yearly over twenty thousand dollars ($20,000) and the average rate is about twenty-five cents per vehicle. Of course, this is exclusive of the traffic by the steamboats and bateaux during summer.

The line after leaving Saint-Joachim will ascend the heights of Saint-Tite and run through this parish to reach the fine and level valley exten-

ding between rivers Sainte-Anne and Gouffre, distant about thirty miles. The soil throughout this valley is fertile and covered with rich forests, to which the railway *exclusively* will give access. When the railway will be in operation, an enormous quantity of timber and saw-logs will be shipped from this valley to the mills at Montmorency Falls, to be here sawn and converted into lumber. Birch and tamarac will also be shipped as square timber to the Quebec market, as also cedar and hemlock, which are found in great quantities in the vicinity of the line. Hemlock bark generally sells from $8.00 to $10.00 per hundred packages in Quebec, which shows what profitable trade can be made in this article when the railroad is built. It can readily be understood that when the railway is in operation, colonization and settlement will rapidly progress along the line, thereby creating a new source of traffic. There is room enough for establishing eight or ten new parishes in that district.

After leaving the forest, the line will pass through the parish of Saint-Urbain, cross river Gouffre, continue through the parish of Saint-Agnès, a few miles in rear of Murray Bay, and thence to the mouth of the Saguenay, viz. the line will run through the whole lenght of the county of Charlevoix in a direction about parallel to that of the Saint-Lawrence, intersecting the great highways of *Saint-Urbain*, *Saint-Agnès* and *Des-Marais*, the only roads by which the inhabitants of the eastern or greatest part of the county of Chicoutimi can communicate with the *rest of the world*, during winter.

Bay Saint-Paul, Murray Bay and Tadoussac are well known as the finest watering-places of the lower Saint-Lawrence. Thousands and thousands of tourists from all parts of Canada and the United States visit these localities, and during the summer season the passenger-traffic shall be immense. Besides tourists, the population of the counties of Charlevoix, Chicoutimi and Saguenay will contribute a large contingent to passenger traffic. In 1871, the population of these counties was as follows: Charlevoix, 15,611; Chicoutimi, 17,493; Saguenay, viz. Tadoussac and Escoumains, 1788, making in all a population of 34,892 inhabitants, who shall have to depend *exclusively* on the railway to communicate with Quebec. As to the freight-traffic, it will be very important. The counties of Charlevoix and Chicoutimi are rich in farm products of all sorts, as is shown by the statistics given in the appendix.

The loop-line to Chicoutimi will probably leave the main line somewhere near Saint-Urbain or Sainte-Agnès, pass through a splendid forest region as far as Ha! Ha! Bay, and continue to the town of Chicoutimi, which is the *chef-lieu* of the county and the *capital* of the rich valley of lake Saint-John, or the *Kingdom of Saguenay*, to use the terms

by which some of our historians designate that great valley. Speaking of this fertile and immense region, the Deputy Minister of Agriculture of the Province of Quebec states in an official document published in 1870 : " As we have remarked elsewhere, the actual population of the Saguenay....already is estimated at about 20,000 souls, although the oldest agricultural settlement dates no further back than twenty years. The Saguenay is capable of containing a population twenty times as great." Speaking of this important district, Mr. Buies says in a book published last year : " We may say it is here that colonization will develop itself on a really large scale, if the inhabitants of lake St. John are at last given a means of rapid communication by railway with the capital, to carry their products."

NATURE OF THE SOIL AND PRODUCTS

The soil almost throughout the whole district through which the line will run is exceedingly rich and fertile, and produces wheat, oats, rye, barley, potatoes, &c., in abundance, with immense crops of hay. Of the region extending between Montmorency Falls and river Gouffre, surveyor-general Bouchette says : " The nature of the soil varies a great deal in so vast a space ; but the general character is nearly the following, viz : on the low grounds is a dark coloured mould of good quality, here and there mixed with sand and clay and some marl ; on the high lands there is for the most part a strong black earth, which, as it approaches the mountains, gives place to a yellowish loam. Among the timber beech, maple, birch, pine, hickory and bass-wood are very abundant, as also the inferior species of cedar, sprucefir, hemlock, &c." This description also applies to the soil of the region traversed by the line east of river Gouffre, as far as Saint-Catherine's Bay and Chicoutimi. It can readily be understood that when the railway is in operation, a large increase in production may b e expected. Actually although that fine country has no regular communication with Quebec, the only place where its products can find a market, the lake St John region is progressing rapidly. " The agricultural progress of lake St-John district, says the Toronto *Mail*, is exceedingly rapid. During the past ten years, the population of the locality has increased 67 per cent, the acres of cultivated lands 116 per cent., bushels of wheat raised 1,147 per cent., butter 140 per cent., and live stock 139 per cent."

WATER-POWERS.

The rivers and streams which are met with on the line of this railway offer advantages for mill-sites unequalled in any part of Canada. Among the number may be mentioned the rivers Montmorency,

nine miles from Quebec; Saut-à-la-Puce, with its romantic falls, fifteen miles from Quebec; au-Chien, Sainte-Anne, a mighty stream formed by a continuous succession of falls from the St.-Lawrence to ten or twelve miles upwards; Gouffre, Murray, Chicoutimi and many others, where mills of any description and of almost any capacity may be erected.

MINES

The country through which the line will pass belong *geologically* to the laurentian or archæan system. Of these formations, professor James D. Dana says: "Abundance of iron-bearing minerals is a striking characteristic of the archæan rocks. It is apparent in the prevalence of the horblendic series. The black variety of hornblende and pyroxene, present in them, containing much iron. It is especially manifested in the existence of immense beds of iron-ore, which consists either of magnitite, or of hematite or of titanic iron (page 151.) In Canada, at Bay St. Paul's, there is a bed of titanic iron 90 feet wide, exposed for 200 or 300 feet, occurring in syenyte, with rutile or oxyd of titanium. The ore does not differ from ordinary specular iron in appearance; but the powder is not red. In Sweden and Norway, the iron-ores are interstratified in the same manner with crystalline rocks,—mainly gneiss, hornblende rocks, chlorite slate, clay slate, quartzite and granular limestone, with which they are more or less laminated" (page 154.) The Bay St. Paul's or Saint-Urbain iron mines which, as professor Dana says, have a thickness of 90 feet, extend over more than a square mile and in fact constitute a mountain of the best titanic iron-ore, and the proposed railway will run through them. They have already been worked by an english company; but the work had to be abandoned on account of losses incurred through ill and incompetent management. They are now in the possession of another company that intend to work them on a better system. The letter of Mr. McCorquedale, published in the Appendix, shows what might be done with those mines. Of course, it is useless to observe that the working alone of those inexhaustible iron-mines would give an enormous amount of traffic to the railway.

TIMBER

Between Quebec and river Saint-Anne, no important amount of available timber exists; but beyond that point to Saint-Catherine's Bay and Chicoutimi, immense forests are to be found composed of pine, spruce, hemlock, tamarac, cedar, birch, maple and other varieties, now untouched for the most part, owing to the want of an outlet to a market. Several individuals and firms now owning timber licenses are

prevented from working their timber limits for want of means to carry timber and lumber out of the forest and will undoubtedly commence and carry large operations as soon as the railway is built. Millions of feet of timber and lumber will be transported by this railway every year to the shipping ports of Tadoussac and Quebec, as soon as the road is open to traffic.

FIRE-WOOD

In Quebec and suburban municipalities, there is an annual consumption of over 120,000 cords of firewood. The price paid for hard wood is from $3.50 to $5.00, and for soft wood from $2.00 to $3.00 per cord. Beyond river Saint-Anne, wood can he had almost for the chopping, and when the freight will not exceed $1.00 per cord, it is evident that an important traffic may be expected in this material. Between Quebec and river Sainte-Anne, there is already a large trade in fire-wood, which is brought in *bateaux* to the city. As will be seen in the appendix, the *bateaux* coming to Palace wharf alone brought from the places situated between Quebec and Sainte-Anne 88,733 cords of wood in five years, or an average of 17,745 cords per year. To that must be added the quantities brought to Renaud's, Laroche's and Convey's wharves, about double of that coming to Palace wharves, which makes about 52,000 cords per year. Of course, the *bateaux* can only be used during summer, so that farmers who make their wood in winter have to wait for five or six months before they can send it to the markets of Quebec and sell it, while they will readily send it by the railroad as soon as it is open to traffic, in order to get their money in the winter, which is precisely the time when they want money.

BUILDING STONE

The whole *côte de Beaupré*, from Montmorency Falls to river Sainte-Anne, is a continuous quarry of first class building stone. The quarries of Château-Richer, especially, are known for the excellence of the material they produce. In all the gouvernment contracts, it is specified that masonry shall be made of Château-Richer stone. All private buildings erected in Quebec are also made of this stone, so that enormous quantities are every year brought to the city. According to an official statement compiled by F. R. Roy, Esq., collector of dues at the Palace wharves, the quantities imported from 1875 to 1879 form a total of 2685 *toises*, or 579,960 cubic feet, which give an average of 115,992 cubic feet per year. The quantity brought in 1879 was 70,-288 cubic feet. The railway will pass at about a quarter of a mile from the quarries.

COLONIZATION

The opening of the railway will give a powerful impulsion to colonization in the region traversed by the line. The rich and fertile soil, mild climate and other advantages offered by the Saguenay district to colonization and settlement are facts two well known and too universally admitted to require comments. In 1871 the county of Chicoutimi, viz : precisely the district which will be immediately accommodated by the projected line, had a population of 17,493, instead of 10,478 inhabitants in 1861, which shows an increase of 7,015 or 67 per cent. During the same period, the acres of cultivated land increased 116 per cent ; bushels of wheat raised 1,147 per cent, butter 140 per cent, and live stock 139 per cent. In no other part of the province was such a progress realized. However, this progress was realized in spite of absolute want of good and regular means of communication with Quebec. the natural and only market for the products of the Saguenay district, and if a railway was built to supply that means of communication, it is quite out of doubt that the extraordinary progress above mentioned would more than double in the next ten years. Actually, although the settlers have no communication with Quebec and have to bring their products with horses to this city, a distance of about 120 miles, large numbers of families leave every year for the Saguenay district where they settle in the expectation of a railway, so attractive are the lands in that region. As has been observed by Mr Lesage, assistant-commissioner of agriculture, the Saguenay district may easily support a population of 400,000 souls and actually it is inhabited by about 20,000 Let the railway be built, and before ten years this figure will be increased ten-fold. In fact, the Saguenay district is by excellence a colonization district and its future depends on the construction of the proposed railway, which will reap all the benefits of it. The population of the county of Charlevoix will also soon double by the building of the railroad and furnish a very large and paying traffic. And so will it be for the north–eastern part of the county of Montmorency. This is plainly established by the report of Revd. O. Richard, given in the appendix.

TOURISTS AND WATERING-PLACES

The tourist in search of health or pleasure could not possibly select any route better calculated to meet all his expections than the one which will be followed by the proposed railway. This line, in its entire lenght, will pass through that picturesque, beautiful and romantic region called the *Switzerland of Canada*, and visited every year by tens of thousand of tourists coming from all parts of Canada and the United States to spend the hot season at Baie St. Paul, Murray Bay

Tadoussac and Ha! Ha! Bay. These are the finest watering-places of the Lower Saint-Lawrence, and they will be so many stations of the projected railroad. It would be idle to insist on the importance of the passenger-traffic which these famous watering-places will bring to the road during summer.

CONNECTIONS WITH OTHER RAILWAYS

For its entire lenght, this railway will have no competing line and will form, in connection with the Quebec, Montreal, Ottawa & Occidental railway and its connections westward, *the shortest line between the Atlantic sea-bord at Tadoussac and all the great cities of the West in Canada and the United States*, thus drawing the winter trade between Tadoussac and Europe, viz : through Canada exclusively, and bringing to all the railway lines on the north shore of the Saint-Lawrence a large part of the western traffic which of necessity goes to the American roads and sea-ports, as soon as navigation closes at Montreal and Quebec. " According to returns compiled in the Bureau of Statistics at Washington, says Mr. Larned in his official report to the American Treasury Department, the foreign commodities carried through the United States to Canada in the fiscal year ended June 30, 1869, amounted to the value of $14,843,620 (more than double the quantity appearing in the Canadian Statistics) and the Canadian commodities shipped through the United States to countries abroad aggregated $5,794,197. In the fiscal year ended June 30,1870, the goods shipped through the United States *to* Canada were of the value of $16,519,637, and *from* Canada, $6,932,-693.... A large portion of the commerce between the old Canadian provinces (Ontario and Quebec) and foreign countries, other than our own, is carried on through the United States. This is made necessary by the winter closing of the St.-Lawrence and by the fact that no railroad connection between the Canadian interior and the seaports of the maritime provinces exists, and that one can be formed only by taking so wide, costly and inconvenient circuit that its commercial usefulness when realized will be very slight."

This statement is quite true as things now stand, even with the Intercolonial Railway open to Halifax and St. John; but, with the Quebec, Montreal, Ottawa and Occidental Railway and the Quebec, Montmorency and Charlevoix Railroad, connecting the *winter sea-port* of Tadoussac with the cities of the West, Canada will easily do without the american railways and sea-ports on the Atlantic and carry itself, on its own lines, its trade with Europe, and the $23,452,330 of foreign commerce mentioned by Mr. Larned as carried in transit through the United States in 1870 may in future be carried through Canada as soon as the winter port of Tadoussac is connected with Quebec through the

Quebec, Montmorency and Charlevoix railway. And this commerce will be carried through Canada on a much shorter and cheaper route than that through the United States, as the following figures will show:

The distance from Chicago to Liverpool *viâ* Tadoussac and Cape Race, is shorter than the route

viâ Portland	by	158 miles
" New York	"	220 "
" Boston	"	253 "
" Halifax	"	400 "

The distance from Toronto to Liverpool *viâ* Tadoussac and Cape Race is shorter than the route

viâ Portland	by	188 miles
" Boston	"	311 "
" Halifax	"	399 "

The distance from Montreal to Liverpool *viâ* Tadoussac and Cape Race is shorter than the route

viâ Portland,	by	158 miles
" Boston,	"	253 "
" Halifax,	"	399 "

The distance from Quebec to Liverpool *viâ* Tadoussac and Cape Race is shorter than the route

viâ Portland,	by	348 miles
" Halifax,	"	397 "
" Boston,	"	510 "

To these figures should be added 158 miles, if the voyage is made through Belle-Isle strait, which is open and clear during the greatest part of the year, so that by this route the *smallest difference in favor of Tadoussac is* 316 *miles.*

These figures show conclusively what amount of traffic the building of the Quebec, Montmorency and Charlevoix railway would bring to the lines of the north shore of the Saint-Lawrence, as far as Chicago. Of course, the comparison is much more in favor of the proposed line if we take in consideration the traffic coming from Duluth, by the northern Pacific, and from Manitoba by the canadian Pacific railway. It is sufficient to mention these facts to show what will be the connec-

tions of the proposed Quebec, Montmorency and Charlevoix line and the enormous quantity of through traffic it will of necessity have as soon as it is built.

There is another very important consideration in favor of this line. One of the greatest inconveniences encountered in the exportation of live stock, which has taken so much importance since a few years, is the lenght of the voyage on the high sea. By the route *viâ* Tadoussac, this inconvenience is to a great extent avoided, since the navigation on high sea is reduced to 1878 or 1970 respectively, the distance from Belle-Isle strait or from Cape Race to Liverpool. The rest of the voyage is through the gulf of Saint-Lawrence, in comparatively still water, which is naturally much more favorable to the transport of live stock on board of steamers. This alone should bring a large part of the live stock traffic to the Quebec, Montmorency and Charlevoix Railway.

WINTER NAVIGATION OF THE SAINT-LAWRENCE

Is navigation *practicable* on the lower course of the Saint-Lawrence, from Tadoussac to the sea, during winter ?—Such is the question on the solution of which is based the scheme of the Quebec, Montmorency and Charlevoix Railway Company.

The answer to this question is affirmative. People who have no knowledge of the subject may have some doubts and raise objections ; but all men who have a personal knowledge of the question, who are *by experience* acquainted with the *condition* of the lower Saint-Lawrence during winter, all agree to state that winter navigation in the gulf is practicable and even easy. On this point, the attention of our business men is especially called on the extracts given in the *appendix* under the head *winter navigation*. Father Lacasse, who was for several years missionary on the coast of the north shore, is quite desinterested and only states what he knows by personal experience and what *he has seen* in the course of his travels through that part of the Saint-Lawrence. His evidence cannot be contradicted. Mr. Gregory's statements also deserve consideration. By his position as agent of the Department of Marine and Fisheries at Quebec, for the lower Saint-Lawrence, he is in direct and official relation with all the light-keepers of that part of the Saint-Lawrence and fully acquainted with all the particulars of navigation in that part of the gulf and his views are those of a man who *knows what he says*. He does not expose a theory, but deals with facts which officially and constantly come to his personal knowledge. The correspondance taken from the *Montreal Herald* also contains valuable arguments in favor of winter navigation. In presence of all the

facts given in those extracts, no man of ordinary common sense can hesitate to admit that the *navigation of the lower Saint-Lawrence during winter is praticable* and that Tadoussac is destined by nature to become the great sea-port of the western provinces of the Dominion.

CONCLUSION

Such is the scheme in which the directors of the Q. M. & C. R. Company, ask capitalists to invest money. When the facts mentioned above are seriously considered, it seems that the promoters of this undertaking are safe in stating that very few schemes offer so many inducements and so encouraging prospects to those supplying the fonds required to carry them through. A good, paying local traffic, a large through traffic. the power granted to the company of purchasing, holding and working timber limits, lands and mines, and of carrying on trade in timber, stone, mineral products and similar materials, a road that can be built and equiped for $16,000 a mile, such are the principal advantages offered by this undertaking. For all these considerations, the company place their scheme with the greatest confidence before the public and expects to meet with no difficulty in raising the money required to carry it out.

APPENDICES

This appendix contains documents and informations destined to give a correct idea of the county to be traversed by the proposed line, of the traffic it may expect and of the scheme in general. In addition, will be found the act incorporating tee company and other items of interest. Special attention is called to all these important matters. Let it be remembered that the total lenght of the line will not exceed one hundred and eighty five miles, viz : one hundred and twenty five from Quebec to Saint-Catherine's Bay, opposite Tadoussac, and sixty miles for the loop or branch line from the main road to Chicoutimi. At $15,000 per mile, this would make $2,775,000 for the whole line, or $1,875,000 for the main line from Quebec to Saint-Catherine's Bay, and $900,000 for the branch line to Chicoutimi. The right of way, on more than one hundred and twenty miles, is given few.

(A)

TRADE OF THE SAINT-LAWRENCE, WHAT IT WANTS.

(From the *New-York Stockholder*)

" Just now about one half of the grain sent by water from Chicago, Toledo and Milwaukee is going to Saint-Lawrence ports....Quebec is the great seaport for the Canadian region....For a long period of years to come Quebec will be the chief port on this continent for the export of lumber. Its facilities for this trade are great, and are such as more than over balance the difficulties and dangers in the winter months of the navigation of the lower Saint-Lawrence. The cargoes of lumber are got off before October and the vessels engaged in the trade find other employment in the winter months.

" *If the navigation of the Saint-Lawrence were supplemented with a view to commerce in the winter, by a short and cheap communication from Quebec to a good Atlantic port,* not only would the lumber trade receive large benefit, but *it is likely that Quebec would become a large market for grain and other exportable products of the West.* When these products are once upon the water, whether shipped at Duluth, Milwaukee, Chicago, Toledo or other point, it is of obvious advantage to carry them by the same freightage as far as possible towards their market. Quebec is 150 miles nearer the market than Montreal—nearer the market which is to become more and more important with respect to our wheat and meat products. We refer to the market for European consumption. As respects wheat, the producers of the Mississippi valley might control that market, provided they knew how to suppress the extortions of Vanderbilt rates of transportation and avoid at the same time the extortions and disturbances created by Chicago speculators, Buffalo forwarders and the various tribes of middlemen who now waylay the grain and provision traffic. That is to say, if the

grain business, from the time the cereals leave the farmer's fields till the time the product reaches the point of consumption, or of export, were conducted as squarely, for instance, as is the lumber trade and the general commerce of Quebec, there is no reason why our grain should not be laid down in Liverpool cheaper than the wheat of southern Russia, notwithstanding the better facilities lately afforded for transportation from the interior to Black Sea ports. The most sanguine expectation of cheap corn for Great Britain has never placed the expected supply of wheat delivered at Liverpool from the Black Sea at less than £2 per quarter, equivalent to $1.23 per bushel, coin.

" Wheat can be raised at a profit in the Mississippi valley at 75 cents, currency, per bushel, at points where it can be delivered at lake ports at 5 cents per bushel; from the farthest of these it can be delivered at Quebec at 20 cents per bushel. It can be freighted from Quebec to Liverpool for 15 cents per bushel, from May to September. Elevator charges, interest and insurance should note exceed 4 cents per bushel The aggregate is 119 cents, currency, per bushel. This calculation implies no middlemen's or speculative profits, but it allows the farmer, the freighter, and the merchant actually furnishing capital or credit for the business, as much as realized in the present course of trade. It would be of infinite advantage to our country, and honest industry would profit by the change, if the trade were conducted on the basis here denoted, since on the terms indicated our country could absolutely supply the demand of all Western Europe, a demand sufficient to make the agriculture of the west a source of large and enduring wealth.

" What is needed, so far as Quebec is concerned, *is cheap and direct communication by rail with the Atlantic.* That by the Grand Trunck or the Intercolonial railway is too indirect and costly.....*It would not be strange if a railway on this route* (direct communication with the Atlantic) *should make Quebec one of the most considerable commercial ports of this continent.*"

The Quebec, Montmorency and Charlevoix railway will give to Quebec this direct and short communication with the Atlantic during winter.

(B)

COMPARATIVE TABLE OF DISTANCES

Chicago to Liverpool

	Railway.	Navigation.	Total.	Difference in favor of Tadoussac route.
Viâ Tadoussac (Belle-Isle Strait)	1,142	2,536	3,678	
" (Cape Race)	1,142	2,694	3,836	
Portland (by G. T. R.)	1,444	2,850	3,994	158 miles.
New-York (average)	961	3,095	4,056	220 "
Boston (")	1,194	2,895	4,089	253 "
Halifax (Intercolonial)	1,706	2,530	4,236	400 "

Toronto to Liverpool

Viâ Tadoussac (Belle-Isle Strait)	628	2,536	3,164	
" (Cape Race)	628	2,694	3,322	
Portland (G. T. R.)	660	2,850	3,510	188 "
Boston (various)	738	2,895	3,633	311 "
Halifax (Intercolonial)	1,191	2,530	3,721	399 "

Montreal to Liverpool

Viâ Tadoussac (Belle-Isle Strait)	295	2,536	2,831	
" (Cape Race)	295	2,694	2,989	
Portland (G. T. R.)	297	2,850	3,147	158 "
Boston (S. E. R.R.)	347	2,895	3.242	253 "
Halifax (Intercolonial)	858	2,530	3,388	399 "

Quebec to Liverpool

Viâ Tadoussac (Belle-Isle Strait)	125	2,536	2,661	
" (Cape Race)	125	2,694	2,819	
Portland (G. T. R.)	317	2,850	3,167	348 "
Halifax (Intercolonial)	686	2 530	3,216	397 "
Boston (Q. C. & P. R.)	434	2,895	3,329	510 "

N. B.—The route *viâ* Belle-Isle Strait, which is open and clear during the greatest part of the year, is 158 miles shorter than the route *viâ* Cape Race, which latter is taken as the base of comparison in this table, so that the differences mentioned have to be increased by 158 miles if the route *viâ* Belle-Isle Strait is taken as a base of comparison.

(C)

WINTER NAVIGATION OF THE SAINT-LAWRENCE

(Extract from Father Lacasse's book : *Une mine.*)

" I must say, to the honour of my countrymen, that this question of a winter port has since several years preoccupied the leading class of our society. Rimouski was for a long time spoken of and then abandoned, and with reason. The names of Paspebiac, Matane, Bic, Father–Point, have been mentioned in news papers. I remember that the governments of Ottawa and Quebec asked me what I thought of a winter port at Seven-Islands, on the north shore of the gulf, which shows clearly that every one appreciates the immense advantages of a winter port for the Province of Quebec, which Providence has made the nearest point between Europe and the West, now the granary of the world. All proclaim that future would belong to our province, were not our capital, which secures so large a fleet in summer, frozen up during six months of the year. Has Providence given us a winter port ? Is Tadoussac this port ?

" I follow an impulsion of my conscience in answering these questions... Having travelled on the coast of the north shore over three thousand miles, sometimes on snow-shoes or on *tobogan*, sometimes in bark canoes or in boats of all dimensions, I was enabled to acquire information which no other could have. Everything is familiar to me on the coast of the north shore. The fisherman, the Montagnais, the Naskapis, the Esquimaux, the ices, the rivers, the shoals, the rocks, the straits, the fogs, the snows, the winds, the streams, the harbours, all these things are known to me. Is Tadoussac a winter port ?.....I answer :

" In the first place, Tadoussac is a good summer port, where winds do not even ripple the surface of water. This fact needs no proof. Therefore, as to its being a winter port, there should be no other obstacle but the ice. Let us examine this point.

" Tadoussac is situated on the north-east side of the Saguenay, at the mouth of this river. The Saguenay is never frozen up during winter for about ten miles above Tadoussac. Opposite Tadoussac, on the other side of the Saguenay, lies the *Batture–aux–Alouettes.* If you look towards the south, you see before you, on the other side of the gulf, Green Island with its famous ebbing tide streams, the fright of our seamen.

" Now, the frost, in winter, should of necessity form ices on bays and small rivers ? Yes, bays and rivers are frozen and missionnaries have many times crossed them on snow-shoes.

" Does ice form in the gulf ? Yes, during calm nights there are found floating ices which follow the direction of streams and winds ; but no one is so green as to believe that the gulf frozes like a lake.

" Now, these streams and winds, what is their direction ? Where do they carry the floating ices ? To use the words of our seamen, the streams of the gulf *carry* everything to the south, even the wrecks of ships which are lost *on the north shore.* Newspapers often mention the fact that wrecks of ships lost at Manicouagan or Pointe–des–Monts, at Ilets-de-Caribou, were found on the south shore. This is so true that our fishermen of the northern coast will tell you, within a margin varying between one and three miles, at what place on the south shore are to be found the remains of a ship which was wrecked on the north shore.

To cross the gulf from south to north, with a wind of the same force, it takes twice the time required to cross from north to south. So, one may cross over from Pointe-des-Monts to Mont-Louis, on the south shore, in four hours, whilst it takes eight hours to cross back with a wind of an equal force. Before Tadoussac, the *ebbing tide streams* carry far away the ices with an astonishing rapidity. Providence has placed the Batture (shoal) aux Allumettes on the opposite side of Tadoussac to stop ices coming from the south-west, which never inter the harbor of Tadoussac. The stream occasioned by the rising tide and coming from Green Island bears to the north only towards the end of the tide and has no chance to cause any nuisance, as the ices were carried far away by the ebbing tide. So much for the streams. Let us come to the winds.

" What are the most frequent winds during winter?—Those blowing from the north and the north-west. These winds drive all the ice to the south, accumulate and break them and thus make with this ice a real bridge having some times a length of several miles on the south shore. It is for this reason that the inhabitants of the south shore are often for whole months unable to see the water. The western and south western winds are also favorable to the north shore. North-easterly and easterly winds alone may be a nuisance for winter navigation. These winds carry the ice to the west and may delay navigation for some days. I say *may delay*, for the floating ices, formed on salt water and consequently deprived of solidity, being formed during only one or two nights, cannot impede navigation. It is more difficult to cross from Quebec to Levis than to pass through these ices. And these easterly winds bringing with them the warmth of the gulf stream determine a simultaneous rise in temperature. The danger of being taken up by frost in the ice is not to be apprehended. As soon as the wind falls, there is invariably *an opening* on the north shore. So much for the winds.

" Here is an irrefutable statement. Between Tadoussac and Seven-Islands, our sea hunters, Canadians, half-breeds and Indians, ramble in all directions in their bark canoes (during winter, of course) on the northern part of the gulf. There is no ice on the water. How many times, when hearing the shot of a gun, I was obliged to use my spy-glass in order to ascertain wether the hunter had killed a seal. You see that there is space for the passage of steamers. I have travelled in boat (chaloupe) over this part of the gulf during all the months of the year. Many times, from the top of mountains, while travelling on snow-shoes from one place to another, I contemplated the sea free from ice and exclaimed : If my countrymen could see what I see, what would not they do to avail themselves of the advantages of winter navigation, advantages which would assure them preponderancy on many other provinces. But what is not done will be done. Providence made her part, it remains for us to make ours.

About this winter navigation, many only shake their heads and have nothing else to say when they are forced out of argument : " There is much ice along the south shore " This is all the answer they can make. They do not refleet that *it is precisely because there is so much ice along the south shore that there is none along the north shore*.

" Many raised objections to me and not one (which shows the competency of those persons) have raised the only objection which deserves to be considered. I am obliged to point out myself this objection. I will do it with pleasure, for I speak for the good of my country and I want to show black what is not white. The ices which we call *fresh ices*

(fresh water ice) are to be feared during the month of March ; these are the ices formed on rivers and bays which dry out at low tide. At the time of high tide, when spring comes on, these ices are detached from the beach and the rocks which retained them. Their thickness has grown every day during winter and hunters assured me that they saw some of those ices grounded in eighteen feet of water. They are *small mountains of ice* (icebergs) against which it would not be safe to run. Neither wind nor waves can brake them. They disappear in the beginning of April. They are not very large (some acres in the gulf are a trifle) and it only requires vigilance during night to render them harmless.

" Does not the ice from Labrador and the Polar Sea come down into the gulf ?

" The ice from the north is carried towards the south by the streams. Winds form those streams which carry the ice into the strait of Belle-Isle. The arrival of ice is not more regular than the streams which carry it. For the last five years, we have not seen that ice for two years. Last winter (1879) ice came into the strait of Belle-Isle on the 25th of February. Sometimes it comes in very late. In 1875, I was detained by ice at Nataskouan on the 22nd of May. The cause of this irregular moving of the ice is not well known. Sometimes, the ice does not enter the strait of Belle-Isle, but come down along side the coast of Newfoundland and reach the warm waters of the gulfstream and the banks of Newfoundland. It was thus that some years ago the *Polynesian* was compelled to force her way through about one hundred and fifty miles of icebergs off the coast of Newfoundland, while traders from Nova Scotia were buying furs from the hunters of Belle-Isle strait, which was free from ice.

" Telegraph will soon inform us of the coming and direction of these ices, which are less dangerous than is generally believed. More than thirty steamships navigate through these ices in all directions during seal-hunting and none ever suffered any accident. Salt water ice, it must be remembered, does not offer the tenth part of the resistance which is met with fresh water ice.

" So much for winter navigation .....

" Some persons may object that winter navigation has been tried. --Where, gentlemen ? In the strait of Northumberland, where a passage has been made through five feet thick of solid ice. Five feet thick of solid ice ! This is unknown on the north shore. I believe that it will always be impossible to keep a regular communication with any harbour on the south shore. The stream constantly carries the ice towards the south, as also the winds which almost constantly blow from the north during winter. Ask our seamen and friends of Gaspé what they think of the northerly wind ? The ices come down by thousands of blocks along the coast of the south shore and accumulate in the Baie-des-Chaleurs, on the coast of New-Brunswick and Prince-Edward Island. The north-easterly wind blows and keeps them there Is it a wonder that they attain a thickness of five feet ?

" Moreover, winter navigation requires a natural harbour, opened by the hand of Providence. Men may build wharves and deepen magnificent bays ; they may build embankments in all directions to stop the waves raised by the winds and so make a magnificent harbour for summer, and for winter a *fine lake* where seamen may skate from the begining of November ; but a winter harbour requires a stream, a strong stream to carry for away the ice formed during night.

" Tadoussac enjoys this advantage. This harbour has a powerful *ebbing tide stream* and is exposed to the northwesterly winds, which possess the two-fold advantage of not raising any

waves and of carrying the ice away. A steamer moored at the wharf of l'Anse-à-l'Eau (Water Cove), one of the coves of the harbour of Tadoussac (north east) may winter there without being injured with the least scratch. Some years ago, when the *Pride of England* was blocked up in the ices of the south shore, where was she taken up to save her from ruin? Was it not the harbour of Tadoussac which received this ship leaking by all parts? This summer, thanks to safety found in the harbour of Tadoussac, you saw that ship sailing on the Saint-Lawrence and making part of our fleet.

(Extract from J. U. Gregory's Lecture.)

"As the subject of winter navigation has taken a strong hold upon the minds of those who are alive to the prosperity of Quebec, before proceeding further with my lecture, it may not be out of place for me to state some views upon this popular subject. I once had some experience of navigating the St. Lawrence below Quebec, when the river was covered with ice, and for a long time I was rather opposed to the idea of its practicability, but when I had that experience it was on the steamship "Napoleon III." She is a powerful steamer, but too wedge shaped to cope with heavy ice. We managed, however, to cut through thirty miles of sheet ice, about four of five inches thick, at very fair speed. It has always appeared to me that the greatest drawback to winter navigation was the want of harbours of refuge, in the event of vessels being overtaken by dark nights, or blinding snow-storms, anywhere between Bic and Quebec. Below Bic there is plenty sea-room; but from Bic, upwards, a vessel cannot anchor upon any of the usual grounds; for no vessel could resist the pressure of the ice coming up or down, with the strong tides, if she is in the way: therefore, safe anchorage, or harbours of refuge, are a necessity. I have lately enquired more carefully into the subject, and have called to my aid experienced navigators, and the weather records of our Department; add to these the excellent explanations made by Mr. Sewell, backed by others, I have considerably changed my mind, and have joined the rank and file of the advocates of winter navigation as far up as Quebec.

"I find that the first safe winter harbour after leaving Bic would be Tadousac, about forty miles up. The next would be Murray Bay, about forty miles further up. Both places have proved safe on more than one occasion all the winter through. There is a ship, the "Mangerton," now at Murray Bay, and two of our lightships snug and safe at Les Eboulements, since winter set in.

"As soon as inward bound vessels would reach Murray Bay, 80 miles up from Bic, (*and I believe this perfectly practicable at all seasons*), they would then have the choice of two channels to come up the last 70 miles to reach Quebec. By the system of telegraphic communication on the south and north shores, assisted by the code of signals, the vessel will learn which channel is the clearer of ice—and take the more advantageous. Should they decide upon the south channel, a long pier or block in the Traverse with range lights which serve as beacons by day, would afford a guide to get through the most difficult part of the river. Should they continue up the north channel, the traverse at the foot of the Island of Orleans is already provided with necessary range lights and beacons. It must be remembered that when one channel is full of ice, which is generally caused by the action of the wind blowing it in that direction, the other is almost free of it. From Murray Bay to Quebec is about 70 miles, and a good steamer should run up in a few hours; but if this stretch is considered too long without a harbour of refuge, would not an ice-breaker about midway over-

come this difficulty, should any really exist ? There is little danger from fogs in winter—and some winters, like the past one have had few if any blinding snowstorms. We often see the Ocean Mail Steamers detained hours by fogs, in the summer season, *while all through the winter, the atmosphere is comparatively clear*, and now that harbours of refuge with safe anchorage are found distributed at reasonable distances, the objection I saw to the practicability of winter navigation have been greatly lessened if not entirely removed. Of course, you will please understand that I do not mean winter navigation for sailing vessels, but for good powerful steamers constructed with a view of showing a bold front to the ice."

(Extract from the *Montreal Herald.*)

A New Maritime Harbour.

" At the last session of the Quebec Legislature, a company was incorporated for the purpose of building a railroad from Québec to St. Catherine's Bay, at the mouth of the Saguenay, and to establish there a new harbor. It is well known that the conveniences of the locality of Tadoussac are incomparable and offer advantages as a harbor possessed by no other, with greater safety and room than that of any other in the St. Lawrence. Bouchette, Admiral Bayfield, and all the other scientific men who have specially and attentively studied the question and explored the locality, are of accord.

" It was for the purpose of profiting by these advantages that the Quebec, Montmorency and Charlevoix Railway Company wished to build the road which is to place this fine harbor in regular communication with western cities, and in connection with the other railways on the north shore of the St. Lawrence. And what may not be said in reference to the ports of Quebec and Montreal, that of Saint Catherine will be continually open, that is to say, during the entire year, even during winter, for sea-going vessels and steamers. It has been established by experience and by observations long since taken, that in descending from Tadoussac the north shore of the river and the gulf is free from ice during the winter, and that the atmosphere is clear of mists and fogs. In winter, only the north, north-west and north-east winds drive all the ice towards the south shore. So true is this, that, during the last winter Mr. E. Vachon, lumber merchant, of Escoumains, at twenty-five miles below Tadoussac, made two voyages by schooner to Malbaie, which is about twenty-five miles above the mouth of the Saguenay.

" What only can impede the navigation of this part of the St. Lawrence during winter are the snow storms. But they are not worse there than on the banks of Newfoundland and Atlantic coasts, and trans-Atlantic navigation is continued without interruption during the winter months. Leaving Bic, to about thirty miles below Tadousac, the width of the river St. Lawrence varies from thirty to forty and even sixty miles, and it must be indeed a furious tempest which could prevent a steamer, under the command of a competent person, safely finding its course in so large a space. And further, it would be easy to establish a system of signals which would ensure safety.

" Although whatever may be thought of the establishment of a new winter harbor above all, it behooves the most serious attention of all those who take an interest in the commercial future of our country. As regards our Western trade, the St Lawrence is an excellent means of communication during the summer, and competes well with the American routes, which are longer and more expensive. But as soon as winter commences this grand highway

of commerce from the West is closed, and the American routes must be adopted to carry on commerce and reach the Atlantic coast, inasmuch as the railway on the north shore of the river can hardly be said to do any business. On the contrary, with a harbor at Tadousac open during the winter, the Railway from Quebec, Montmorency and Charlevoix would become naturally the prolongation of the Quebec, Montreal, Ottawa & Occidental, tapping all the railways of the north shore of the St. Lawrence, which could thus count upon all the transit traffic of the year in winter and summer. Thus it would direct trade from the Americans to the Canadians, without even taking into consideration that it would be shorter and more direct, and consequently less costly than that of the United States and the Ports of Portland, Boston and New York.

" This project is of the greatest importance to our country, above all for railway companies whose lines pass on the north shore of the St. Lawrence. It will enable us to throw off that dependence on which we are now in regard to American railways, and for every reason; and we hope that it will receive the most favorable consideration from our business community and from all those who have an interest in our commercial prospects."

D

TADOUSSAC, THE GREAT CITY OF THE DOMINION

(Extract from Father Lacasse's Book : *Une Mine*)

" The railway from Quebec to Tadoussac would be the continuation of the Pacific Railway. Tadoussac, a winter harbor, should be the terminus of this great highway destined to bring to Europe the riches of the West. Tadoussac ! a winter port nearer to Liverpool than Halifax, Portland and New York. Tadoussac ! a port nearer to Canada West, in a straight line, than Halifax, Portland and New York. Tadoussac, which in the middle of winter stretches an arm to the West and the other to Liverpool and can boast of being, at least in theory, the nearest commercial point between those two places .....

" Tadoussac has the advantage over these two cities (Halifax and Portland), not only with regard to the distance, but also with regard to immigration to our country. Europe has a yearly excess of population of four hundred thousand souls. Millions of those immigrants who leave Europe with the intention of settling in the Dominion, especially in Ontario and Manitoba, for the greatest part abandon us at Halifax, Portland and even Richmond : by the route of Tadoussac, they would be secured to us. They would make the voyage without meeting on their way with the american canvassers.

" At the military point of view, what a secure route for receiving and shipping troups who could circulate in all directions on this route without fear of being surprised by ennemy ! What an expugnable fortress Tadoussac would be !

Let some people say what they like, future belongs to our province. No influence, political or national, can bar out the interests of *nations who shall always choose, to reach Europe, the shortest and least expensive road.* Would Tadoussac put us in communicatoin with the maritime world only three months more than Quebec does, the benefice would be immense. The port of Quebec is closed in the month of November, precisely at the time when the west

is ready to export its products. In the spring, when every thing comes alive in the commercial world, when the transatlantic cable is busy at work in all directions, when March and April come on, Quebec is still dormant and Canada inactive. Tadoussac, the terminus of the Pacific Railway, will then bring life and prosperity to our country.

" Tadoussac is the end of the Atlantic by sea and that of the Pacific by land. The first ships that brought our fathers stopped at Tadoussac, *the end of sea*, before sailing up the river. Tadoussac was then the *landing place* of the Old World ; it was there that two centuries ago the Old and the New World met..... It is there that two hundred and fifty years after the New World will meet the old. It is asked what will be the *city of the Dominion*, viz. the city which will concentrate the commerce of a country larger than Europe, of a country which will be inhabited by a population of two hundred millions of souls : will that city be Toronto ? Ottawa ? Montreal ? Quebec ? Halifax ? Generations that will come after us, moved by what politicians call the force of events and what I call the Providence of God, will answer : *Tadoussac is the city of the Dominion.*

" This is not a dream. What was Chicago when our fathers were born ? What was Winnipeg a few years ago ? Besides, any scheme based on the interests of nations has always been carried out. Influences may retard its execution, but prevent it, never."

E

EXTRACT FROM THE CENSUS OF 1871

Counties	Population	Acres of land held	Acres of cultivated land	Bushels of cereals	Bushels of vegetables	Tons of hay	Pounds of butter	Pounds of cheese	Barrels of beef&pork	Pounds of maple sugar	Pounds of wool	Pounds of flour	Yards of stoffs	Head of live stock
Beauport (parish).....	4,053	25,000	7,045	40,975	53,495	2,350	*.....	.....	.....	.....	.....	.....	.....	.....
Montmorency.....	12,085	185,142	66,769	303,702	318,507	10,925	215,098	9,011	.....	327,293	28,324	17,500	61,762	28,013
Charlevoix.....	15,611	346,640	117,167	323,841	227,052	11,987	184,182	32	.....	42,026	61,394	28,828	138,788	42,442
Chicoutimi.....	17,493	335,726	87,345	398,880	183,096	5,966	148,106	6	.....	2,215	43,394	12,180	103,263	44,772
Saguenay	5,487	29,267	6,883	11,583	29,486	1,386	19,355	.....	.....	.....	4,103	532	9,233	3,225
	54,729	921,775	285,209	1,078,781	811,636	42,614	586,741	9,049	.....	371,534	137,215	59,040	313,046	118,452
—in tons.....	.....	.....	.....	26,969	20,290	42,614	293.37	4.6	.....	185.76	68.61	29.52	313.04	59·226

Since 1871, date to which these figures apply, there has been an increase of at least twenty per cent, which would give a total *tonnage* of 187,491.70 tons of agricultural and farm produce. At least one third of these products would be transported by the railway, which would give 62,497,23 tons of freight. The average of transport would be about eighty miles, which, at three cents per mile and per ton, would give $149,993,35.

* For the items in these columns, the census of 1871 gives the figures for counties only, so that it was impossible to give the figures for the parish of Beauport.

F

EXTRACT FROM THE CENSUS OF 1861

Counties.	Population 1861	Amount held in acres	Acres cultivated land	Bushels cereals	Bushels vegetables	Tons hay	Lbs. butter	Lbs. cheese	Barrels beef and pork	Lbs. maple sugar	Lbs. wool	Lbs. flax	Yards flannel and linnen	Head live stock
Beauport (parish).....	3,260	22,109	8,475	50,279	19,528	2,284	18,784	1,118	313	1,386	3,047	1,141	3,532	4,064
Montmorency.....	11,136	159,804	61,484	278,208	153,986	8,838	171,606	4,935	1,828	323,632	22,581	17,382	45,264	29,194
Charlevoix.....	15,223	285,658	103,681	317,354	223,625	10,290	230,495	.....	4,809	98,855	54,578	19,704	95,353	49,302
Chicoutimi.....	10,478	127,669	40,415	156,981	102,805	3,648	61,777	.....	1,937	174	15,395	5,073	30,281	18,746
Saguenay.....	6,101	22,141	3,745	8,028	9,941	447	5,476	.....	125	300	1,712	81	1,857	1,557
	46,198	617,381	617,800	810,850	609,885	25,507	588,138	6,053	9,012	424,347	97,313	43,381	176,287	102,863
—Tons.....	.....	.....	.....	20,271	15,249	25,507	294	3.002	456	212.12	48.65	21.69	.....	13,429

G

EXTRACT FROM THE CENSUS OF 1851

Counties	Population 1851	Amount held in acres	Acres cultivated land	Bushels cereals	Bushels vegetables	Tons hay	Lbs butter	Lbs cheese	Barrels beef & pork	Lbs maple sugar	Lbs. wool	Lbs. flax	Yards flannels and linnen	Head live stock
Beauport (parish).....	2,377	15,323	5,947	25,980	8,508	720	7,590	464	235	4,205	1,138	899	1,712	2,326
Montmorency.....	9,598	142,067	62,379	212,862	119,491	10,999	116,775	5,171	3,511	244,137	19,795	26,005	57,808	26,085
Charlevoix.....	13,041	205,757	81,258	24,803	74,193	1,572	71,031	.....	3,342	56,383	44,747	33,765	88,196	39,548
Chicoutimi	6,074	63,224	14,115	50,559	26,036	799	9,036	.....	321	7,253	3,553	2,084	6,542	5,705
Saguenay	1,668	9,697	1,252	2,934	2,984	236	1,150	.....	92	.....	135	101	65	527
	32,758	436,068	164,951	507,138	281,212	14,326	205,582	5,635	7,501	311,978	69,368	62,854	154,323	74,191

H

POPULATION OF THE COUNTRY THROUGH WHICH THE QUEBEC, MONTMORENCY AND CHARLEVOIX RAILWAY WILL PASS.—EXTRACT FROM THE CENSUS OF 1871.

City of Quebec	59,693
Parish of Beauport	4,053
County of Montmorency	12,085
" Charlevoix	15,611
" Chicoutimi	17,493
" Saguenay	5,487
Total population	114,422

Remarks—In passenger traffic, it is generally estimated that a population makes a round trip once a year. In this instance, however, to keep within bounds, we reduce that estimate one half and calculate that 57,211 persons only will travel one hundred miles, instead of 180 miles, the length of the road : at $2.00 each, or two cents per mile, we find $114,422 derivable from the total passenger traffic alone, leaving aside the 70,000 pilgrims visiting every year the shrine of Sainte-Anne-de-Beaupré, and the 10,000 or 15,000 tourists frequenting the watering places of Saint-Paul's Bay, Murray Bay and Tadoussac.

I

Region traversed by the line between river Sainte-Anne and Saint-Urbain.

Next to river Sainte-Anne, the first parish is Saint-Joachim, of which Surveyor-General Bouchette says :

" The parish of Saint-Joachim is thickly inhabited ; the lands in it are of good quality, and in high cultivation, producing wheat and other grain very plentifully ; it contains also some very luxuriant pasturage. Within this parish, delightfully situated on a rising ground, a short distance from Cape Tourmente, is a country residence, with a chapel and various out buildings, belonging to the Seminary of Quebec and whither many of the superiors retire every year during the fine season." (*Topographical description of Lower Canada*, page 554.)

" The census of 1871 enumerates as follows the area cultivated and the farm products raised in this parish :

Total number of acres of land occupied	11,235
" acres of land improved	5,102
" acres of land under crops	2,636
" acres of land in pasture	2,432
" acres of land in gardens and orchards	34
Bushels of wheat raised	6,101
Acres of land sown with wheat	334
Average yield per acre, in bushels	18.26
Bushels of barley raised	562
" oats "	45,292
" rye "	314
" peas "	609
" buckwheat raised	245
" corn "	52
" beans "	88
" potatoes "	16,074
Number of acres planted with potatoes	144
Average yield per acre, in bushels	111.12
Tons of hay raised	1,210
Bushels of turnips and other roots	1,550

The number of acres in cereals and root crops, wheat and potatoes excepted, is 1082 and the yield 48,712 bushels, which gives an *average of* 45.02 *bushels per acre*.

Unfortunately the census only gives the totals for the whole county, for dairy produce and live stock, and we have no particular information for the parish of Saint Joachim ; but the figures given for cereals, hay and root crops give an idea of what should be the dairy produce and live stock.

Between Saint-Joachim and Saint-Urbain, the country through which the line will run is thus described by Mr. Charles Rheaume, who was employed by the government to explore and trace the *Cauchon road*, opened some years ago through this very same region :

" This road passes through a large tract of fertile land. It passes close to four magnificent lakes in which fish abound ; it is as level as any road that can possibly be opened. There will be only one bridge to construct between the last two lakes (of about 25 to 30 feet in lenght) and it will cost but little.

" All the lots of land to which this road will gives access are several hundred feet below the level of the road now frequented, and are much superior to those already located. They are protected from the north wind by a range of mountains, and are consequently much less exposed to heavy frosts, which are severely felt on the present road. The incline is towards the south ; thus they are always exposed to the heat of the sun, and while this must add to their facility, it will preserve them from the effects of frosts.

" The timber found along this road is birch, maple, &c., &c."

(*Reports on Colonization Roads for* 1861, page 16)

Reverend O. Richard writes as following upon this region :

" The great advantages afforded by the forests behind Saint-Fereol in their supply of tamarac for ship-building is worthy of attention, this parish being only thirty miles from Quebec.

" What a splendid development of the resources of this locality would be produced by its cultivation if ready access could be obtained to the excellent lands behind Saint-Fereol, extending for six or nine miles, covered with fine woods, extensive maple groves in uninterrupted succession to the foot of the mountains, with every advantage for the most profitable cultivation.

" Nothing can be finer than the quality of the soil, according to the report of Mr. Lefrançois and others who have inspected the locality, covered with extensive forests of maple and other woods : it is of the greatest value."

J

COUNTRY BETWEEN SAINT-URBAIN AND SAINT-CATHERINE'S BAY.

The line, between these two points, will pass in rear of the township of Settrington, and through the townships of Desalles, Chauveau, Callières and Saguenay. The nature of the soil, from Saint-Urbain to the point where the Saint-Agnès road intersects river Malbay, is thus described by Thomas Simard, in a report to the commissioner of Public Works :

" From the river Malbay (or Murray), at the point where it is intersected by the road, to the settlements of Saint-Urbain, the distance is about nine miles, and the soil throughout is *level and fertile.* The kinds of timber met are birch, black-birch, pine (white and red), spruce, cedar, fir."

This applies to the township of Desalles. In the *Settler's Guide* published by the Department of Crown Lands, the following mention is given of this township : " Acres surveyed and for sale, 15,493—price per acre, 20 cents—soil of various quality, but rocky in some places." The good quality of the soil of this township seems to be established by the fact that 1422 lots have been taken up by settlers during the last few years, in spite of the remoteness of this locality, which is over twenty miles distant from the Saint-Lawrence."

The next township is Chauveau. Mr. J. C. Demeules, who surveyed and explored this township for the Department of Crown Lands, in 1869, writes as follows in his official report :

" I am glad to be able to state that part of the township Chauveau which I have surveyed, without possessing a very remarkably rich soil, is yet very fit for agriculture and offers as promissing a field for colonization as any of the new concessions of the adjacent seignories settled during the last few years.

" I do not doubt that a grant, however small, to encourage the opening of a colonization road next season, would induce a large number of young pioneers to transport themselves thither to begin their clearences fortwith. Already more than fifty lots have been selected, and the persons who have taken them are only waiting for an outlet through the forest to commence operations.

The next townships through which the line will run are Callière and Saguenay. In the *Report on Colonization Roads for* 1861, page 11, these townships are described as follows :

" The soil along the road, as well as in the interior, is a yellow loam and is very suitable for agricultural purposes.

" On the whole extent of the road, places accessible by water are immediately settled and lots have been taken up by settlers even in advance of the completed part of the road. Water powers are numerous and of extraordinary strength. The crop has been excellent. The settlers are very hopeful, and all they require to enable them to establish their children in the vicinity is the construction of colonization roads."

K

THE COUNTRY BETWEEN THE MAIN LINE AND HA! HA ! BAY.

Mr. Thomas Simard, who explored the country traversed by the Saint-Agnès road, extending from some miles in rear of Murray Bay to Ha! Ha ! Bay, gives the following description of the country, in a report to the commissioner of Public Works :

" From the river Malbay (or Murray) at the point where it is intersected by the road, to the settlements of Saint-Urbain, the distance is about nine miles, and the soil throughout is level and fertile. The kinds of timber are birch, black birch, pine (white and red) spruce, cedar, fir, &c."

" From the same point of intersection of river Malbay by the road to Ha ! Ha ! Bay, the kinds of timber found are maple, birch, black birch, cedar, pine, spruce, fir, &c. : the soil is a yellow loam and a vegetable mould, and the road passes through a valley bordered on both sides by mountains unequally distant the ones from the others, leaving between themselves considerable areas suitable to the forming of profitable settlements.

" In the neighbourhood of river Malbay, the mountains are not far distant the ones from the others ; but as they advance towards the interior, the valley gradually widens and only contracts in the vicinity of the lesser lake Saint-John.... From this lake to Ha ! Ha ! Bay, the distance is about twelve miles, and as you travel towards the North-West, the mountains recede, leaving between themselves a vast, level and fertile country.

" By this report, it is easily shwon that the valley through which the road will run (viz. from river Malbay to Ha ! Ha ! Bay,) is for three fourths of the distance composed of a fertile soil, and *nearly level*, consequently favorable to settlement, which would certainly induce settlers to avail themselves of these advantages. »

The railway will follow about the same direction as the colonization road above described by Mr. Simard.

Between the line of the railway and river Saguenay, there are considerable areas of first class lands, especially in the township of St-John, about which the following mention is to be read in the *Report on Colonization Roads for* 1861 :

" The fine township of St-John, to which at the present time many settlers are directing their steps, is only accessible by water.

The Anse-Saint-Jean Road, when completed as far as the St-Agnès Road, will open a communication between that locality and the old settlements of the St-Lawrence and Upper Saguenay.

" The soil along the road is clayey and adapted for cultivation, with the exception of two miles at its junction with the St-Agnès Road, where the land is low and swampy.

" The timber along the road consists for the most part of cedar, maple, black birch, ash, tamarac, beech, and pine in great abundance...

" The township of St John, on the river Saguenay, has attracted some attention since the commencement of the road from l'Anse Saint-Jean, to enable the settlers to open up their lands and to communicate with the Upper-Saguenay and the St-Lawrence. This new road will open up for colonization an area of 240 (two hundred and forty) square miles of good land, which the government purpose offering in part to settlers next year.

" St-John is principally settled by young families from Les Eboulements. There is a fine church with a resident priest, and flour and saw-mills. This locality possesses the finest climate in Lower-Canada, and will, before many years, be one of the finest parishes of the country. "

L

LAKE SAINT-JOHN REGION.

Mr. James Richardson, of the Geological Survey of Canada, writes as follows in his report upon this region :

" The valley of Lake Saint-John may very properly be considered as commencing at the mouth of Ha ! Ha ! Bay. This constitutes the eastern extremity of the general depression or comparatively level surface of which the area occupied by the lake is probably the lowest flat ; and from this point the boundaries of the depression separate from one another, that on the north side of the Saguenay running about N. O. and W. for about thirty miles, and then changing its bearing to about N. 75° W., and in that direction running for about sixty miles. The boundary on the south side of the Saguenay separates a little from the south side of Ha ! Ha ! Bay, in its progress running nearly S. W. Between the north and south boundaries where they can be no further traced by the eye, there is a separation of about fifty miles for the breath of the valley, the length of which up to a line running across at the upper end of the lake is about seventy-five miles, the general bearing of the valley

being N. 70°. W. How much farther it may extend in the same direction, I am unable to say. Thirty miles added to the distance above mentioned would give an area of 5000 square miles. But as viewed from Lake St-John the northern boundary appears to terminate, and the valley may perhaps spread out in the eastward. Indeed one of the Indians who was with me asserted that it did so, stretching along in that direction to the seven-Islands on the Saint-Lawrence, while in the opposite one it extended to Lake Temiscaming.

" The cultivable land of the valley of St. John most probably occupies a very large proportion of its area, and as in the settled parts of it good crops seem to be the general result, it appears to me very probable that *the valley will hereafter support a very considerable population.* There appears to be no doubt in the minds of the settlers that they are able to grow all the kinds of grain produced in the neighbourhood of Montreal, and in equal abundance; and the unexplained superiority of climate in the valley over places more to the south renders the investigation of this part of the province a subject of considerable interest.

" Mr. Blair, who superintends the works of MM. Price & Son, at Grand Bay, has kindly furnished me with the returns from the farm of the firm for the past eleven years. He informed me that the results for ten of these years had already been published in the *Toronto Globe.* I shall therefore only give the return for the season which had just past when I left Chicoutimi.

" *Statement of Produce raised on the Farm of Messrs. W. Price & Son, Grand Bay, under the management of Mr. Blair.*

Produce	Bushels sown	Yield per bushel	Bushels per arpent	Sown or planted.	Cut.
Wheat.....	33	15	20	5 May to 20 May.	15 Aug. to 20 Aug.
Wheat and Rye....	44	16	24	9 " to 18 "	15 " to 20 "
Barley.....	11	20	30	25 Ap. to 18 "	30 July to 13 "
Oats and Rye.. ...	154	12	25	9 May to 18 "	19 Aug. to 3 Sept.
Oats.....	238	12	30	25 Ap. to 8 "	20 " to 9 "
Peas.....	40	10	18	1 May to 8 "	31 " to 22 "
Potatoes.....	100	20	275-300	7 " to 27 "	6 " to 15 Oct.

Hay, total yield, 25,200 bundles (201.60 tons); average yield per arpent, 200 bundles (about 1.6 ton per acre); cut 27th July to 19th August.

Indian corn, a small quantity in the garden, good sized; picked green for use 15th August, and thoroughly ripe 15th September."

(*Reports of Progress for* 1857, *page* 75-77.)

" The clay deposit between Chicoutimi and the head of Grand Bay has in some places *a thickness of* 600 *feet;* and where this exits land-slips are of common occurrence. They give to the surface a broken and rugged aspect, yet it is not uncommon to find whole farms situated on the remains of such *éboulements*, while others standing on the still unmoved ground might from analogy be supposed to be in positions somewhat insecure.... The conditions which produce this slips extend to Lake St. John, and may be expected beyond, as the clays were observed on the banks of Kinogami, at Bon Portage and on Belle River, where in many places they have a *thickness of a hundred feet.* On Lake St. John the clays were seen

to the east of the Metabetchouan, at the Hudson Bay Company's Post; and to the north-west of River Ouiatchouan, as far as Blue Point, where a very thriving settlement is established on them." (*Idem*, page 73.)

Mr. Richardson writes as follows of the minerals found in that region, (page 90 and 91):

"*Bog Iron Ore.* — This ore was observed in small quantities on the east side of the Ha! Ha! River, about one mile from Ha! Ha! Bay on the road leading from it to Bay St. Paul. It occurred in small masses of a quarter or half an inch in diameter lying somewhat detached from one another. Though they were not sufficiently numerous to be of any value, they may indicate deposits of more importance in the vicinity.

"I was informed by Mr. J. Kane, Crown Land Agent at Ha! Ha! Bay, that a small quantity of the ore was found in digging a ditch on a lot belonging to Mr. Joseph Tremblay in the second range of Bagot, beyond River St. Alphonse."

Iron ore is found in large quantities in the townships of Labarre and Kinogami. Speaking of the first named township, Mr. N. T. Hébert, overseer on the Kinogami road, says in his report for the year 1854:

"There are water-powers in many places. The most considerable and most advantageous are in the vicinity of Lake St. John. . . . Limestone is found in large quantities on Lake St. John, and *in the township of Labarre there is a whole mountain of iron.*"

This has been confirmed by more recent explorations, and in the *Settler's Guide*, an officiel publication issued by the Department of Crown Lands, we find the following statement:

"Kenogami — acres surveyed and for sale, 5,034 — price per acre 20 cents — quality of the soil, twenty-five per cent middling and inferior, balance rocky; good timber in small quantity. *Iron mine in the center*" (page 55).

"*Mill-stones.*—The feldspathic rock at the fall on the River Aulnais yield a material which has been applied to the manufacture of mill-stones. The rock is destitute of any indication of stratification, but it appears to split readily into rectangular blocks, by the application of wedges. It is made up of feldspar with mica equally distributed through it and without any observed quartz. It must therefore be the unequal hardness of the two minerals, rather than the great resisting power of the feldspar, which renders the stone effective. I was informed by Mr. Felix Langlais that he had used the stone in his mill at the fall for grinding wheat, and that it answered the purpose remarkably well.

"*Rensselaertite.*—The refractory nature of this mineral, which often occurs in considerable rock masses, and its applicability to various ornamental purposes, renders the occurrence of it worthy of notice. The thickness of the band observed at the rapids of the Peribonka is not sufficient to be made available; but the presence of the mineral in association with the labradorite rocks gives a reasonable expectation that it may be found in large abundance in some parts of the district in which these rocks appear so largely to prevail.

" *Labradorite.*—Although none of the exquisitively beautiful opalescent varieties of the rock were observed, there is yet every probability that they will hereafter be discovered in the valley of Saint John Lake; but the porphyroid and violet-blue descriptions met with would give materials capable of application to purposes of decoration. The uniform color of the mass exposed at the Peribonka rapids. and the great solid blocks that could be obtained there induced me to think that at some future time it might be turned to good account."

In a *sketch published by authority of the Bureau of Agriculture,* professor T. Sterry Hunt, of Boston, member of the Geological Survey of Canada, writes about the valley of Lake St. John as follows :

" To the northwest of Quebec, besides the plains which border the river, there is a considerable area of low-lying clay lands, cut of from the great St. Lawrence basin by Laurantian hills, and occupying the valley of Lake St. John and of a portion of the Saguenay. Here is a small outlying basin of Lower Siberian rocks, like those about Montreal, and overlaid in like manner by strong and deep clays, which extent over the adjacent and little elevated portion of the Laurentian rocks, and form a soil as well fitted for cultivation as any part of the lower St. Lawrence valley. The valley of this lake is probably not more than 300 feet above the sea; and from the sheltered position the climate is not more rigorous than that of Quebec. Several townships have within a few years been laid out in this valley, and have attracted large numbers of French Canadians from the older parishes in the valley of St. Lawrence.

RECENT STATISTICS OF THE COUNTY OF CHICOUTIMI

This Statistical Table is taken from Mr. Buies Work, intituled : *Le Saguenay et la Vallée du Lac Saint-Jean,* published last year.

County of Chicoutimi	1861	1871	Percentage of increase
Population of the county	10,478	17,493	67
Bushels of wheat raised	10,912	136,009	1,147
do oats	39,316	117,249	198
do barley	39,922	71,210	78
do potatoes	101,382	156,996	55
Tons of hay	3,648	5,966	63
Pounds of butter	61,777	148,106	140
Heads of live stock	18,746	44,722	139
Acres of land under crops	40,415	87,345	116

M

The Railway a necessity for the progress of Lake St. John.

The following extract is translated from an able address written by Honorable Judge Routhier to the members of the Quebec Legislature :

" Beyond the Laurentian Mountains, between the sources of two great rivers, the Saguenay and the St. Maurice, lies an immense territory, with a most fertile soil and watered by magnificent lakes and rivers. It contains thousands and thousands acres of land best adapted to agriculture and which only require the labor of settlers to produce the most aboundant crops.

" It is one of the finest districts of our country, and unfortunately one of the most ignored, because it is isolated. Several of you must have visited that region, and undoubtedly you could not help expressing your admiration when, after a tedious march through the forests, you discovered, expanding boundless before you on its fine sandy bed, this very Mediterranean Sea which is called Lake St. John.

" Well, this immense valley of Lake St. John, capable of supporting hundreds of thousands of settlers and of nourrishing cities, is inhabited by only some twenty thousand souls, and will perhaps depopulate if it is not provided with good means of communication through which to export its products.

" It is the time to do something, gentlemen ; this vast and fine territory, so favored by nature, only wants to be favored by you to become the granary of our Province. Throw over the mountains, which isolate that region, two iron rails of fifty leagues in lenght, and you will not only create a granary capable of supplying food to your country, but you will also open a refuge, a home to the unfortunate emigrants whom misery or love of their country will bring back to us.

" For eight months in the year *the inhabitants of that district have no communications with cities and during the other four months, communications are excessively expensive and difficult, not to say impossible* They, also, are really exiles on the borders of their native country, far from their friends and relatives, far from comfort and enjoyments of society, far from riches and the prospects of fortune.

" Over the mountains they raise their arms in prayer towards you, and what they ask will not be for them alone a source of prosperity. It will be for other exiles a grateful and happy return, and for yourselves a granary of aboundance. What you will give to-day they will return it to morrow, and if not to you, they will pay their debt to your sons.

" Give them a railway and forewith they will give you cheap timber and fire-wood, cheap meat, cheap fish and wheat in aboundance. On the shores of their rivers and of their large lake, your sons and brethren will find a comfortable living and prosperity for the future. Loneliness will not scare them, for thank to the railway they will be near the paternal home, and in a few hours they will come to shake hands with you and thank you for your liberality.

" This must be done, it must be done by all means.

" It must be done for those poor unfortunate whose labors and exertions will only acquire value when you have given them an outlet for their produce. It must be done for those poor emigrants who come to us and for whom you must prepare a home. It must be done for yourselves, and especially for the city of Quebec which has not in its neighbourhood a territory sufficiently rich and large to insure its future progress. The railway train which will bring you the products of lake St-John will return loaded with your merchandises, and out of this exchange of riches general prosperity will grow."

ESTIMATE OF TRAFFIC

The following computations are intended to give an approximate idea of the traffic which may reasonably and legitimately be expected for the railway.

Passengers.

In passenger traffic, it is generally estimated that a population makes a round trip once a year. Reducing this estimate by one half and calculating, for argument sake, the length of the railway at one hundred miles, instead of 180 miles, and not taking into consideration the increase of population since 1871, we find :

Population, 114,442 souls ; half, or 57,221 persons travelling 100 miles, viz : only one half trip, at 2 cents per mile—$2.00 each.....	$114,422	
Tourists visiting Murray Bay, 2,500 trips at $5.00 each.....	12.500	
Tourists visiting Tadoussac, 500 trips at $6.00...	3,000	
Tourists, anglers and hunters visiting Ha ! Ha ! Bay, Chicoutimi, 1,000 trips at $7.00.....	7,000	
Pilgrims visiting the shrine and Church of Sainte Anne, 60,000 trips at 50 cents.....	30,000	
	———	$166,922

Freight.

Farm products.—The farm products of the county of Chicoutimi, such as grain, &c., as given in the census of 1871, represent 20,589 tons for cereals, roots, hay and butter. This has nearly doubled since 1871, so that assuming that *one third* of this tonnage will be carried by the railway is evidently a safe calculation. Therefore we find for this traffic, 20,589 tons, third 6863 tons, at 2 cents per ton and per mile, on 120 miles..... 15,676

Live stock = one tenth of 44,772 heads = 4,477 and counting an average of 10 heads per car : = 447 cars at $20	8,940	
Calculated on the same basis, the farm products of Charlevoix would give 5281 tons of freight. Assuming this freight to be carried from St-Urbain only to Quebec, viz : 60 miles, we find.	6,337	
And for live stock, 424 car loads at $12.00	5,088	
		36,036
As a margin to compensate for errors in above, the traffic in farm products and live stock from Montmorency is left aside.		
Forests products.—600 car loads of timber and lumber, from the region between Saint-Urbain and river Sainte-Anne, at an average of $10.00 per car	6,000	
Fire-wood from the same district and the region between river Sainte-Anne and l'Ange-Gardien, 40,000 cords, at an average of $1.00 per cord	40,000	
		46,000
Mine products.—One thousand car loads of cut stone from Château-Richer, at $5.00 per car.		5,000
Merchandise—300 car loads from Quebec to Chicoutimi, @ $20	6,000	
For other places, nearer, say	4,000	
		$ 10,000
Mail subsidy.—From Quebec to Chicoutimi, 120 miles @ $100 per mile		12,000
Total traffic		$275,958
Passengers	$166,922	
Freight	97,036	
Mails	12,000	
		$275,958

This estimate only applies to the section of the line between Quebec and Chicoutimi, and no account is taken of the enormous traffic which the Saint-Urbain iron mines would give, if they were worked as they will most probably be before long. The same remark applies to the opening of the port of Saint-Catherine's Bay, which will bring a traffic sufficient to maintain the road. In fact, all the above calculations are much below the actual figures, and the results they show may be accepted in all safety. The working of the road shall certainly give much more than $275,958 yearly.

Supposing the working expenses will absorb 50 per cent of the gross earnings, which is the high figure for a road to be worked in such favorable conditions as the projected line will be, there remains a sum of $137,979 to pay the interest on the cost of the road, which shall be under $16,000 per mile, or $1,920,000 for the 120 miles from Quebec to Chicoutimi. At 6 per cent, viz : 5 per cent for interest and 1 per cent for sinking fund, the amount to be taken from the earnings of the road for interest and sinking fund would be $115,200, leaving a balance of $22,779 after payment of interest and operating expenses.

Such are *the facts* on which is based the scheme of the *Quebec, Montmorency and Charlevoix Railway Company.* But, of course, the position will be much better when the population and resources of the rich, but actually so scarcely settled country, traversed by the line, will be doubled by the opening of the road. . . .

" An Act to incorporate the Quebec, Montmorency and Charlevoix Railway Company.

(Sanctioned 30th June 1881.)

" Whereas Charles Langelier, advocate, and the Honorable François Langelier, both of the city of Quebec, Louis Napoléon Carrier, notary, of Levis, Onésime Gauthier, yeoman, of Saint-Urbain, and several other persons have by their petition prayed for the passing of an act to constitute them a body politic and corporate and confer upon them the rights and privileges necessary for the construction and working of a railway, from some point in the city of Quebec to some other point on the banks of the River Saguenay ; and whereas it is expedient to grant the prayer of the said petition :

" Therefore, Her Majesty, by and with the advice and consent of the Legislature of Quebec, enacts as follows :

" 1. The said Charles Langelier, François Langelier, Louis Napoléon Carrier, Onésime Gauthier and such other persons as may become associated with them, in virtue of the present act, are hereby constituted a body politic and corporate, under the name of " The Quebec, Montmorency and Charlevoix Railway Company."

" 2. The said Company is vested with all the rights and privileges required to build and work a railway, starting from some point in the city of Quebec and ending at some point on the banks of the Saguenay River, between Tadoussac and Ha-Ha Bay, following as much as possible the north shore of the river St. Lawrence.

" 3. The capital stock of the said Company shall not be less than five hundred thousand dollars, divided into shares of one hundred dollars each, and the amount to which debentures of the said company may be issued shall be one million dollars, with power to increase the same, if necessary.

" 4. The board of directors of the said company shall be composed of seven directors, four of whom shall be a quorum, and they shall elect two of their number as president and vice-president, respectively.

" 5. The general meeting of the shareholders for the election of directors shall be held on the first Monday of July of each year, at the place and hour indicated in the notice concerning such meeting, and such notice shall be inserted in a newspaper, published in the city of Quebec, during the two weeks previous to the date of such meeting. The other meetings of the shareholders shall be published in the manner prescribed by the by-laws of the company.

" 6. Until the election of directors, which shall take place at the first annual meeting of the shareholders, the said Charles Langelier, François Langelier, Onézime Gauthier, J. B. Z. Dubeau, Thomas Edwin Foster, Ludger A. Roberge and Auguste Laberge, shall form the board of directors of the company so constituted and shall have all the rights and powers and enjoy all the privileges conferred by law upon the board of directors elected by the shareholders at their annual meeting, and particularly to open stock-books for subscriptions to the capital of the said Company, to call instalments on the subscribed stock and cause the same to be paid up, to issue obligations, bonds or debentures, and to commence and continue the construction and working of the said railway.

" 7. The principal place of business and the head office of the company shall be in the city of Quebec, or in such other place, as may be determined by the board of directors.

" 8. The company may acquire and hold lands, timber-licenses, mining rights and other property of a like nature and work the same for its own profit.

" 9. Notwithstanding the provisions contained in the Quebec Consolidated Railway Act of 1880 and particularly in the sixteenth and seventeenth sub-sections of section seven of the said Act, the company may construct and work branch-lines, each of twenty-five miles in length, and, for such purpose, it shall have all the powers, rights and privileges conferred upon it for the construction and working of its main line. It may also build bridges, wharves and all other works necessary for the construction and working of its line.

" 10. Notwithstanding articles 21 and 22 of the Municipal Code and the provisions of section 16 of the Quebec Consolidated Railway Act, 1880, the Quebec, Montmorency and Charlevoix Railway Company shall not be bound to make drains and fences, of a greater size or more expensive than the drains and fences made on the lands traversed by the railway, by the owners of such lands, and in any case, the said company shall not be bound to make fences and drains in places, where the line of the said railway shall be wholly situate within the water mark of the highest tides. In the event of the said railway being situate, partly within and partly without the water marks of the highest tides as above mentioned, the said company shall not be bound to make drains and fences, except on the portion which is situate outside the highest tide mark; provided, nevertheless, that the company shall not close or obstruct line ditches or other drains made by the owners of lands, traversed by the railway of the said company, and in existence at the time such road is built.

" 11. All the provisions of the Quebec Consolidated Railway Act 1880, which are not inconsistent with the provisions of the present act, shall apply to the Quebec, Montmorency and Charlevoix Railway, as if they were incorporated in the present act.

" 12. The work hereby authorized shall be commenced in two years and terminated in ten years.

" 13. The present act shall come into force on the day of its sanction."